INFORMATION LINK

Information Services Division

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Software Development Services

'SHORT CLIPS' FROM SOFTWARE DEVELOPMENT

Vern Welder

Year 2000 conversion of mainframe applications is 61% complete.
Lotus Notes application development has started. Greg Van Vleet is our designated contact for Lotus Notes issues. Contact Greg at 328-2448, msmail.gv33@ranch.state.nd.us

Real Audio services will be available from ISD by October, 1998. Future plans are to provide Real Video services. Anyone interested in using Real Audio services can contact Vern Welder at 328-4302, msmail.vw11@ranch.state.nd.us

THE FUTURE OF E-MAIL AND SCHEDULING

Gary J. Vetter

A recent article in *Messaging Magazine* depicted e-mail as "the work horse…the business application that is critical to every person with an organization…the center of the communications universe." Within ND State Government, some agencies would quickly agree with this "work horse" analogy, while others would consider it a bit strong. Regardless of your current reliance on e-mail, one thing is certain; it *will* increase.

The good news is that software companies are responding by releasing the next generation of messaging. Here at ISD, we are totally redesigning our system to take advantage of the emerging technology. As a result, three basic strategies have been developed to position ND State Government for the future of e-mail & scheduling:

- Microsoft Exchange, Lotus Notes, and POP3/IMAP4 will be the standardized platforms.
- E-mail servers will be centralized and administered by ISD.
- Agencies will be responsible for purchasing and supporting client software and licenses.

To accomplish this, the following actions and timelines will be proposed at the next Standards and Policy Review Group meeting in September:

- Microsoft Mail and OfficeVision users will need to migrate to a standardized platform prior to the year 2000.
- cc:Mail users will need to migrate to a standardized platform prior to the end of the next biennium.
- Existing Lotus Notes, Microsoft Exchange, and POP3/IMAP4 accounts will need to be transferred to the centralized systems at ISD prior to the end of the next biennium.

The future benefits:

- Today, over 100 PCs and servers within state government play a role in the e-mail system. A centralized system will reduce the "points of failure" to less than 5.
- Fewer machines mean lower hardware and software costs. In addition, fewer people will be required by agencies for on-going support and administration.
- As message routing is simplified, reliability of messages will increase. A centralized system will also allow ISD to install monitoring software to quickly identify potential problems.
- The structure of the current e-mail system requires that the state's global e-mail directory be stored and synchronized on over 60 servers. A centralized system will reduce administration efforts and increase accuracy by storing only 2 copies of the directory.
- All e-mail addresses will end in "@state.nd.us". This will shorten and simplify the various addressing schemes being used today. It will also allow employees to change agencies within state government without having to change their e-mail address.

Five years ago, ISD began providing e-mail services by connecting a few hundred people in a handful of agencies. Today, messaging has

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grown to include over 6000 people in more than 70 agencies. E-mail may not be "the center of the communications universe" yet, but it certainly has become the center of communications within ND State Government.

MIDDLEWARE UPDATE

Vern Welder

In the April issue, I mentioned that ISD was considering a pilot test of Software AG's middleware solution called Entire SQL Server. We will not do the pilot because the costs could not be justified. No alternative solution(s) for ODBC access to Adabas files is being researched at this time. Our suggestion is to replicate the information from Adabas to DB2 and use IBM's Datajoiner middleware to connect to the DB2 database. If anyone feels that we should continue to pursue direct ODBC access to Adabas, please contact Vern Welder at 328-4302 or msmail.vw11@ranch.state.nd.us

APPLICATIONS SERVER

Vern Welder

ISD has started researching application server technology that provides distributed object processing, state and session management for WWW applications and databases, and provides security for Internet based transactional computing. The goal is to offer software development service for on-line transaction processing applications that run from WWW browsers.

Administrative Services

PROTECTING YOUR NETWORK ASSETS

Jeff Carr

The late 1990's has seen an explosion in the importance of computer networks for sharing both information and computer assets within and between state agencies. Along with this increase in importance, comes an increasing need to protect these assets from threats that include intentional malicious acts and accidental disclosures of confidential information. Some operating systems provide a measure of protection by requiring users to log in with a user name and password before allowing any access, but others, notably Windows 95, lack this basic security mechanism.

No operating system can currently protect your confidential information while it is in transit via the network from one computer to another. A network Firewall can increase your level of protection by allowing you to specify which externally located machines, using which network protocols can communicate with the machines on your private network. A network Firewall permits the formation of encrypted, private channels for network communication between your machines and those at remote sites.

ISD has recently concluded an evaluation of eight commercially available Firewall Products - IBM's Firewall, Altavista Firewall, Cisco System's Centri Firewall, Guardian Firewall, Elron Firewall, Trusted Information System's Gauntlet, Raptor System's EagleNT, and Checkpoint System's Firewall-1. The results of this evaluation, as well as an overview of what a Firewall can and cannot do, are available from ISD in a two-part, non-technical report. The report describes the two different types of Firewall available and illustrates the strengths and weaknesses of each type. No single Firewall is right for everyone, rather the type of Firewall deployed must fit the security needs of the network it is protecting. In addition, it describes ISD's evaluation process and the evaluation criteria used by ISD in determining the two Firewall products to support: Checkpoint System's Firewall-1 and Raptor System's EagleNT. For a copy of the ISD Firewall Evaluation or to discuss any network security concerns, contact Jeff Carr at 328-1034 or carr@pioneer.state.nd.us.

WINDOWS INTERNET NAME SERVICE SERVER

Sam Stoxen

ISD has implemented a WINS (Windows Internet Name Service) server for our environment. WINS is designed by Microsoft to eliminate broadcast traffic of NetBIOS over TCP/IP. It will register NetBIOS computer names and resolve them to IP addresses for local and remote hosts.

There are several advantages of using WINS. The primary advantage is that client requests for computer name resolution are sent directly to a WINS server. If the WINS server can resolve the name, the IP address is sent directly to the client. Since a broadcast on the network is not performed, network traffic is reduced. If the WINS server is not available, the client can still send a broadcast to try to resolve a name. This broadcast should be limited by the routers to the local network.

The other advantage is that the WINS database is dynamic and current. This eliminates the need for an LMHOSTS file on each PC and reduces administration time.

The following instructions describe the method to install the WINS server address under NT.

1. Click the start button
2. Point to settings
3. Click on control panel
4. Double-click the network icon
5. Click on the protocol tab
6. Click on TCP/IP protocol
7. Click the Properties button
8. Click the third tab on the top which is WINS address and in the primary WINS server box enter "10.2.2.40"
9. Click on OK to go back to the network box and select OK again.
10. Restart the computer to have the settings become active.

When your PC restarts, it registers by name in the WINS database. Now every NetBIOS name request will be sent to the WINS server before initiating a broadcast on the local network. Installation is very similar under 95. However, remember to press the add button after entering the WINS server address in 95.

Remember, you need to have a unique NetBIOS name and the easiest name to use is the DNS name. This will probably be an area that will have a standard naming convention in the not-to-distant future to avoid problems with duplicate NetBIOS names.

Also, the WINS server can be used via dial-up. If you use our Dialup for TCP/IP access, you are behind the firewall and can set the WINS server entry at home to our WINS server. You can then browse the network as if you were on the local segment. Of course, this presumes that you have enabled NetBIOS over TCP at home.

If you have any questions, contact Sam Stoxen at 328-4325 or sstoxen@state.nd.us

DISASTER RECOVERY CONTRACT

Larry Lee

ISD has selected IBM Business Recovery Services to be the new disaster recovery service provider. The services provided include hotsite access and telecommunications service. Coverage is for the mainframe computer system and AS/400 system. Some client/server systems are also being considered for coverage.

The contract begins July 1, 1998 and will provide coverage for two years. ISD has the option to extend the contract for an additional two years. The new contract is the result of an RFP that was issued in April. Three companies submitted bids which were then evaluated by ISD and the Contingency Planning Advisory Committee. The IBM service provided the best solution in terms of compatible equipment and cost.

YEAR 2000

YEAR 2000 USERS GROUP

Larry Lee

ISD plans on setting up a Year 2000 users group. The intent of the group is to exchange information regarding agencies' Year 2000 progress. We will also exchange information on tools used to check hardware and software and to share compliance information in order to reduce duplication of efforts. The information will be exchanged at meetings set up by ISD. The first meeting will be in July and will be posted on ISD's Year 2000 web page. Refer to http://www.ranch.state.nd.us/isd/y2k/ after July 1 to find information on the first meeting.

If anyone in your agency is interested in attending these meetings, please contact Larry Lee at 701-328-2721 or msmail.LL12@ranch.state.nd.us.

YEAR 2000 SURVEYS

Larry Lee

Periodically you may receive a questionnaire or survey from a private company doing business with or in the state of North Dakota. These surveys typically ask about the progress your agency has made in its year 2000 projects and contain requests for guarantees that the State of North Dakota's systems will be year 2000 ready. It has become a standard practice among companies working on their year 2000 projects.

The Risk Management Division recommends that agencies not complete and return these surveys, but forward them to the agency's legal counsel or the Risk Management Division for handling.

If you have any questions on this, please contact Jo Zschomler at 328-4901.

Information Technology

INFORMATION TECHNOLOGY PLAN REVISIONS

Nancy Walz

As agencies go through the process of submitting their budget for the 99-01 biennium, they may find that their Information Technology Plan needs to be revised. The IT plan should reflect the agency's budget, including any optional packages. Agencies should also review the system/function goals and objectives and the project description and benefits narratives because this information will be included in the statewide IT plan along with the budget information.

Any time that an agency makes significant revisions to its Information Technology Plan, the revised plan should be submitted to ISD, Information Technology Planning Section, with a Revision Submittal Form (SFN 51686). This form may be downloaded from ISD's web page. The agency may submit a complete copy of the revised plan or just the pages that have changed.

Revisions should be sent to ISD, Information Technology Planning Section, Room 101, Judicial Wing. ISD will review the changes and follow-up with the agency if required. Once the revisions are approved, a letter will be sent to the agency noting that the changes have been approved and asking that a copy of the revisions be sent to Legislative Council.

ISD is asking that all revisions to the IT plans be completed by June 30, 1998. If you need an extension or have questions about the revision process, please call Nancy Walz, Jim Heck or Dennis Klipfel at 328-3190.

ISD EMPLOYEE PROFILE

Name: Sharilyn Martel

Job Title: Production Control Specialist III

Job Responsibilities: Responsible for receiving, scheduling, and maintaining systems for production processing and tape management. I work with department coordinators, development staff, tech services, and computer operations to create effective processing.

Years of Service: 27

Educational Background: High school graduate and one year of college at Bismarck State College. I have attended classes on Dispatch/Basic Usage and Administration, Advanced Function Printing, and Using OPC/ESA for Production.

Who do you consider to be your customer? Anyone needing the services of production control.

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Anyone interested in contributing information or would like to be added to the mailing list should contact the editor at North Dakota Information Services Division, 600 East Boulevard Avenue, Bismarck, ND 58505-0100, (701) 328-3190. FAX: (701) 328-3000.

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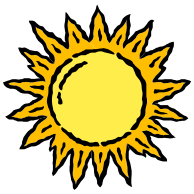

Every day look for some small way to improve the way you do your job.

Be happy with what you have while working for what you want.

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